

ABSTRACT

A method for halftoning a gray scale image to generate a halftoned image uses a stochastic screen is designed to provide visually pleasing, blue noise dot profiles when thresholded at any gray level and wherein substantially all the 5 threshold values corresponding to gray levels between g_{s1} and g_{s2} coincide with black positions in a constraining checkerboard pattern and substantially all the threshold values corresponding to gray levels between g_{s2} and g_{s3} coincide with white positions in the constraining checkerboard pattern.